



Educator Guide: Space Nutrition Newsletter



<http://www.haco.jsc.nasa.gov>

Pumping Iron

Volume 4, Issue 5

This overview will help you, as an educator, use what is contained in this issue of the Space Nutrition Newsletter in the classroom.

Facts:

Iron is an important mineral that has many functions:

- ✍ Iron works with proteins in the body to produce energy from fat and carbohydrate.
- ✍ If you don't eat enough iron you will get tired more easily and you may not be as alert during school. Too often people don't get enough iron in their diets.
- ✍ About 2/3 of the iron in the body is stored in erythrocytes (uh-rith-row-sites) or red blood cells.
- ✍ Iron and red blood cells deliver oxygen to all tissues and organs. In the graphic, the truck is made from iron, and is transporting it's load of oxygen to the areas that need it.
- ✍ Anemia is severe iron deficiency which is caused by a lack of iron in the diet or excessive bleeding. Anemia impairs the brain in developing humans.
This may be reversed by adding iron rich foods to the diet.
- ✍ Iron rich foods include meat, eggs, dried fruits, pumpkin, and fish.
- ✍ Space flight causes astronauts to have fewer blood cells and too much iron.

Activities:

- ✍ There is a **science experiment** at Thea's Corner that pulls the iron out of your breakfast cereal...amazing! You will want to do this experiment in a lab setting.
- ✍ Diego gives you updated information on the space program and how vitamin C plays a role in iron absorption at "Did you know?" .
- ✍ The **Word of the Month**, antioxidant, can be defined from the synopsis on the first page of the upcoming newsletter.
- ✍ A **Web Challenge** is included, so take the newsletter to your computer lab!

We have a new email address! We welcome your comments. space.nutrition.newsletter@nasa.gov